

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MASAHIRO MATSUSHITA

Appeal No. 96-1463
Application 08/048,181¹

ON BRIEF

Before HAIRSTON, FLEMING, and CARMICHAEL, Administrative
Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed April 20, 1993.

This is an appeal from the final rejection of claims 1 through 12. In an Amendment After Final (paper number 9), claim 9 was amended.

The disclosed invention relates to a method and apparatus for adjusting the positions of a plurality of images so that the plurality of images may overlap one upon another.

Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. An image position adjusting apparatus for adjusting the positions of a plurality of images such that the plurality of the images may overlap one upon another, comprising:

i) an image display means for reproducing the respective images from image signals, which represent the respective images, and displaying the reproduced images,

ii) a transformation means for transforming each of the images, which are displayed on said image display means, into a simple image, said simple image being represented by only the image signal components of the corresponding image signal which have signal values larger than a predetermined threshold value,

iii) a polygon display means for displaying an arbitrary polygon on each of said simple images,

iv) a shift means for shifting the polygon displayed on each of said simple images,

v) a deformation means for deforming the polygon, which is displayed on one of said simple images, and deforming the polygons, which are displayed on the other simple images, so

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as to interlock with the deformation of said polygon, which is displayed on said simple images, and

vi) a rotation means for rotating the polygons, which are displayed on said other simple images.

The references relied on by the examiner are:

Hernandez et al. (Hernandez)	4,686,522	Aug. 11, 1987
Iwasaki et al. (Iwasaki)	4,992,781	Feb. 12, 1991
Chiu et al. (Chiu)	5,019,976	May 28, 1991

Claims 1 through 5 and 9 stand rejected under 35 U.S.C.

§ 103 as being unpatentable over Iwasaki in view of
Hernandez.

Claims 6 through 8 and 10 through 12 stand rejected under
35 U.S.C. § 103 as being unpatentable over Iwasaki in view
of Hernandez and Chiu.

Reference is made to the briefs and the answer for the
respective positions of the appellant and the examiner.

OPINION

We have carefully considered the entire record before us,
and we will reverse the obviousness rejection.

It is the examiner's position that Iwasaki discloses
everything set forth in claims 1 through 5 and 9, except for

"a polygon display means, shift means and rotation means"
(Answer, page 3).

Iwasaki discloses an image synthesizer for an image editing apparatus in which a synthesized image can be displayed by superposing two or more source images one on top of another so that all of the images are visible and transparent to each other. Under the control of data processor 17 (Figure 1), the two source images 21 and 22 (Figure 2A) are read from image memories 11 and 12, respectively, according to address signals from the address generator 15. The two source images are then superposed to form a synthesized image 23 (Figure 2A) that is displayed on display 13 (Figure 1). As seen in Figure 2B

the superposingly synthesized mutually transparent image 23 consists of vertically elongated thin picture elements 24 and 25 respectively of the original source images 21 and 22 each of one pixel in width alternately arranged in horizontal direction at the areal ratio of 1:1 such that the two original source images 21 and 22 appear as if they were placed one on top of the other (column 3, lines 40 through 47).

In other words, in Iwasaki

image data from the two image memories 11 [sic, 11] and 12 are not averaged with respect to each pixel in the superposed area. Instead, image data are

alternately read from the image memories 11 and 12 according to address signal from the address generator 15 and they are directly displayed on the display device 13. As a consequence, time required for data processing can be significantly reduced (column 4, lines 2 through 9).

While we agree with the examiner that Iwasaki discloses "an image display means for reproducing the respective images from image signals which represent the respective images and displaying the reproduced images" (Answer, page 3), we do not, however, agree with the examiner that Iwasaki discloses a transformation means that transforms "each" of the two images 21 and 22 into "a" simple image, and that the simple image is represented by only the image signal components of a corresponding image which have signal values "larger than a predetermined threshold value" (claims 1 and 9). Iwasaki is silent concerning a "predetermined threshold value," and Figure 2A of this reference clearly shows that the two images 21 and 22 are superposed to form one synthesized simple image 23, and not "a" simple image for "each" of the two images 21 and 22. Part iii in claims 1 and 9 makes clear that two simple images are formed after the transformation of the two images. Thus, Iwasaki lacks a transformation means that

operates in accordance with the requirements of claims 1 and 9. This deficiency in the teachings of Iwasaki is in addition to the deficiencies noted supra by the examiner. We also note that Iwasaki lacks a polygon deformation means as required by both claim 1 and claim 9.

For teachings lacking in Iwasaki, the examiner turned to Hernandez for teachings of polygon shifting, polygon deformation, and polygon rotation (Answer, pages 3 and 4). Hernandez discloses a method of editing graphic objects in an interactive draw graphic system. As illustrated in Figure 2 of this reference, polygonally shaped graphic objects 21 through 23 are displayed on screen 20 of display 10. In an edit operation, the rectangular polygon 23 is moved from the bottom of the screen to the top of the screen (Figures 3 through 6). When the object editing mode is entered, the printing cursor 25 (Figure 3) appears on the screen, and an edit menu 27 (Figure 4) is brought up adjacent the cursor. The edit action MOVE is selected, and the cursor is thereafter positioned adjacent the rectangular polygon 23 (Figure 5). The rectangular polygon is then carried from the lower portion

of the screen to the upper portion of the screen by movement of the cursor with a mouse.

Hernandez does indeed disclose polygon shifting, polygon deformation, and polygon rotation, but the polygonal shapes 21 through 23 are not displayed on any other images as set forth in parts iii through vi of claim 1 and parts iii through v of claim 9 (Brief, page 7). In view of this deficiency in the teachings of Hernandez, we are not convinced by the examiner's reasoning that it would have been obvious to the skilled artisan to combine Iwasaki with Hernandez "to manipulate the displayed plurality of images by rotating, moving or deforming the polygon to a desired locations [sic, location]" (Answer, page 4). Stated differently, we do not agree with the examiner that the skilled artisan would have modified the specific image synthesizer teachings of Iwasaki with the polygonal image editing teachings of Hernandez. If the teachings of the two references are combined in the manner suggested by the examiner, we are not even certain what type of device would result from such disparate teachings. In summary, we agree with appellant that:

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The Examiner has attempted to pick and choose individual features of the devices disclosed in the cited references in order to assemble the claimed device without providing any motivation . . . to do so. Such a hindsight reconstruction of the invention is improper within the § 103 context (Brief, page 7).

The obviousness rejection of claims 1 through 5 and 9 is reversed.

The additional reference to Chiu discloses method and apparatus for comparing a working image (i.e., injured brain slice image 12a in Figure 3) with a previously acquired reference image (i.e., healthy brain slice image 12b in Figure 3). Although we agree with the examiner (Answer, page 5) that images produced via radiation are disclosed by Chiu, we nevertheless agree with the appellant that Chiu "fails to cure the deficiencies of the other references discussed above" (Brief, page 8). The obviousness rejection of claims 6 through 8 and 10 through 12 is reversed.

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DECISION

The decision of the examiner rejecting claims 1 through
12 under 35 U.S.C. § 103 is reversed.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge))
)	
)	
)	BOARD OF PATENT
MICHAEL R. FLEMING)	
Administrative Patent Judge)	APPEALS AND
)	
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JAMES T. CARMICHAEL))
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